

IN THE CLAIMS

Please amend the claims as follows:

Claims 1-27 (Canceled):

Claim 28 (New): An optical recording medium in which a write-once or rewrite operation of data can be performed with a block including a group of data as a unit,

wherein buffer areas having a fixed length for random access are respectively disposed before and after respective blocks,

whereby when a new block is recorded a start point for a buffer area before the new block is not fixed relative to an existing block preceding the new block, and the new block is recorded in a state that the buffer area provided with respect to the new block and the buffer area provided with respect to the existing block adjacent to the new block overlap with each other.

Claim 29 (New): The optical recording medium as set forth in claim 29, wherein a recording unit block is constituted by a respective of the blocks and the buffer areas before and after the respective block, and a guard area or areas is or are provided at a rear portion of one recording unit block or at a rearmost portion of successive plural recording unit blocks.

Claim 30 (New): The optical recording medium as set forth in claim 28, wherein the buffer area disposed immediately before a respective of the blocks includes a guard area for overlap at a time of recording and a preamble for signal processing, and signal patterns for a frequency pull-in of a Phase Locked Loop (PLL) at a time of data reproduction and an Auto Gain Control (AGC) are recorded at the guard area or the preamble.

Claim 31 (New): The optical recording medium as set forth in claim 28, wherein the buffer area or areas disposed immediately before or immediately after a respective of the blocks includes or include a guard area for overlap at a time of recording, and a signal pattern for automatic adjustment according to a power of a light source is recorded within the guard area.

Claim 32 (New): The optical recording medium as set forth in claim 28, wherein the buffer area disposed immediately before a respective of the blocks includes a guard area for overlap at a time of recording and a preamble for signal processing, and plural synchronization patterns having distances and identification information that are different from each other are recorded at the preamble.

Claim 33 (New): The optical recording medium as set forth in claim 28, wherein the buffer area disposed immediately after a respective of the blocks includes a postamble for time adjustment of signal processing and a guard area for adjustment of a recording end position, and a signal pattern for a Phase Locked Loop (PLL) according to a reproduction clock is recorded at the postamble.

Claim 34 (New): The optical recording medium as set forth in claim 28, wherein the buffer area disposed immediately after a respective of the blocks includes a postamble for time adjustment of signal processing and a guard area for adjustment of a recording end position, and a signal pattern for detecting a reproduction end of the block is recorded at the postamble.

Claim 35 (New): The optical recording medium as set forth in claim 30, wherein the signal pattern is a repetitive pattern of 3T/3T/2T/2T/5T/5T.

Claim 36 (New): The optical recording medium as set forth in claim 31, wherein the signal pattern is a repetitive pattern of 3T/3T/2T/2T/5T/5T.

Claim 37 (New): The optical recording medium as set forth in claim 33, wherein the signal pattern is a repetitive pattern of 3T/3T/2T/2T/5T/5T.

Claim 38 (New): An information processing apparatus adapted for performing recording or reproduction of information with respect to an optical recording medium in which a write-once or rewrite operation of data can be performed with a block including a group of data as a unit,

the information processing apparatus including data recording means for generating recording channel data in which buffer areas having a fixed length for random access are added before and after respective blocks to record the data onto an optical recording medium,

wherein when recording of a new block is started with respect to a first block that has been already recorded, a start point for a buffer area before the new block is not fixed relative to the first block preceding the new block, and the new block is recorded in a state that the buffer area disposed immediately before the new block and the buffer area provided with respect to the new block overlap with each other, and when recording of the new block is completed, the new block is recorded in a state that the buffer area disposed immediately after the new block and the buffer area disposed immediately before a next block adjacent to the new block overlap with each other.

Claim 39 (New): The information processing apparatus as set forth in claim 38, wherein recording and reproduction are performed with recording a unit block including a respective of the blocks and the buffer areas before and after the respective block as a processing unit, and a guard area or areas is or are provided at a rear portion of one recording unit block, or at a rearmost portion of successive plural recording unit blocks at a time of recording of recording channel data.

Claim 40 (New): The information processing apparatus as set forth in claim 38, wherein the buffer area disposed immediately before a respective of the blocks includes a guard area for overlap at a time of recording, and a preamble for signal processing,

the information processing apparatus further comprising:

data reproducing means for reproducing a signal pattern recorded at the guard area or the preamble to use the signal pattern thus reproduced as a signal for a frequency pull-in of a Phase Locked Loop (PLL) and an Auto Gain Control (AGC).

Claim 41 (New): The information processing apparatus as set forth in claim 30, further comprising:

data reproducing means for reproducing a signal pattern recorded within a guard area for overlap at a time of recording of the buffer area or areas disposed immediately before or immediately after a respective of the blocks, to use the signal pattern thus reproduced as a signal for automatic adjustment according to a power of a light source.

Claim 42 (New): The information processing apparatus as set forth in claim 38, further comprising:

data reproducing means for reproducing plural synchronization patterns recorded at a preamble for signal processing of the buffer area disposed immediately before a respective of the blocks to establish synchronization.

Claim 43 (New): The information processing apparatus as set forth in claim 38, further comprising:

data reproducing means for reproducing a signal pattern recorded at a postamble for time adjustment of a signal processing of the buffer area disposed immediately after a respective of the blocks to use the signal pattern thus reproduced as a Phase Locked Loop (PLL) of a reproduction clock.

Claim 44 (New): The information processing apparatus as set forth in claim 38, further comprising:

data reproducing means for reproducing a signal pattern recorded at a postamble for time adjustment of a signal processing of the buffer area disposed immediately after a respective of the blocks to perform detection of a reproduction end according to the respective block.

Claim 45 (New): A recording method for performing a write-once or rewrite operation of data with a block including a group of data as a unit,

wherein buffer areas having a fixed length for random access are respectively disposed before and after respective blocks,

whereby when a new block is recorded, a start point for a buffer area before the new block is not fixed relative to an existing block preceding the new block, and the new block is recorded in a state that the buffer area provided with respect to the new block and the buffer

area provided with respect to the existing block adjacent to the new block overlap with each other.

Claim 46 (New): The recording method as set forth in claim 45, wherein a recording unit block is constituted by a respective of the blocks and the buffer areas before and after the respective block, and a guard area or areas is or are provided at a rear portion of one recording unit block or at a rearmost portion of successive plural recording unit blocks.

Claim 47 (New): The recording method as set forth in claim 45, wherein the buffer area disposed immediately before a respective of the blocks includes a guard area for overlap at a time of recording and a preamble for signal processing, and signal patterns for a frequency pull-in of a Phase Locked Loop (PLL) at a time of data reproduction and an Auto Gain Control (AGC) are recorded at the guard area or the preamble.

Claim 48 (New): The recording method as set forth in claim 45, wherein the buffer area or areas disposed immediately before or immediately after a respective of the blocks includes or include a guard area for overlap at a time of recording, and a signal pattern for automatic adjustment according to a power of a light source is recorded within the guard area.

Claim 49 (New): The recording method as set forth in claim 45, wherein the buffer area disposed immediately before a respective of the blocks includes a guard area for overlap at a time of recording and a preamble for signal processing, and plural synchronization patterns having distances and identification information that are different from each other are recorded at the preamble.

Claim 50 (New): The recording method as set forth in claim 45, wherein the buffer area disposed immediately after a respective of the blocks includes a postamble for time adjustment of signal processing and a guard area for adjustment of a recording end position, and a signal pattern for a Phase Locked Loop (PLL) according to a reproduction clock is recorded at the postamble.

Claim 51 (New): The recording method as set forth in claim 45, wherein the buffer area disposed immediately after a respective of the blocks includes a postamble for time adjustment of signal processing and a guard area for adjustment of a recording end position, and a signal pattern for detecting a reproduction end of the block is recorded at the postamble.

Claim 52 (New): The recording method as set forth in claim 47, wherein a repetitive pattern of 3T/3T/2T/2T/5T/5T is recorded as the signal pattern.

Claim 53 (New): The recording method as set forth in claim 48, wherein a repetitive pattern of 3T/3T/2T/2T/5T/5T is recorded as the signal pattern.

Claim 54 (New): The recording method as set forth in claim 50, wherein a repetitive pattern of 3T/3T/2T/2T/5T/5T is recorded as the signal pattern.